Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of

Modernizing the E-rate Program For Schools and Libraries

WC Docket No. 13-184

Reply Comments of the Los Angeles Unified School District

In Response to FCC Public Notice DA 17-921 Seeking Reply Comments on Category Two Budgets

The Los Angeles Unified School District (LAUSD) thanks the Commission for the opportunity to reply to comments made in response to FCC Public Notice DA 17-921, WC Docket No.13-184 regarding various aspects of the E-rate Category 2 budget.

LAUSD is the nation's second largest school district serving more than 640,000 students in kindergarten through 12th grade, at over 900 schools, and 187 public charter schools. District boundaries spread over 720 square miles and include the city of Los Angeles as well as all or parts of 31 smaller municipalities plus several unincorporated sections of Southern California.

The changes to Category 2, beginning in 2015, are a good start and allow 100 percent of eligible LAUSD schools to receive some funding. However, the challenge continues to be maximizing the limited funding. The \$150 per student is insufficient to meet all school needs.

LAUSD takes a strategic approach when utilizing Category 2 funds. Priority is on short-term objectives that ensure reliable and available access to the Internet and instructional resources. All schools receive funding for repair and upkeep of eligible equipment. Most schools receive funding for software upgrades and patches including bug fixes and security patches.

The District's long-term objective is to use E-Rate funding to modernize school networks to meet ongoing mandates and instructional needs, while replacing aging, failing, and obsolete equipment and cabling. LAUSD agrees with the State E-rate Coordinators Alliance's (SECA) October 23, 2017 FCC Public Notice DA17-921 comments on Category 2 Budgets, which identifies an "industry recommended refresh cycle is five years". Gartner, in a March 2015 article titled "Know When it's Time to Replace Enterprise Network Equipment", identifies the useful life for routers, core switches, LAN switches, wireless controllers and access points as 5 to 7 years. Cabling typically has a longer life expectancy. The fiber cabling backbone life is typically 15 to 20 years, depending on site conditions. LAUSD typically replaces network equipment between the ages of 7 to 10 years. Factors determining priority and replacement dates

include equipment failure rates, impact of failures, security exposure, system condition, available parts, manufacturer end-of-support, and firmware or software stability.

Over the five-year E-Rate funding cycle, LAUSD prioritizes addressing schools' short-term repair needs. The long-term objective, for schools with remaining funds, is to modernize the network. The current allocation of \$150 per student insufficient to cover basic repairs and network upgrades. Starting in the 2017 funding year, six percent of the District's schools will exhaust their funding for basic, short-term repairs. The number of schools exhausting funds for basic repairs will significantly increase during the final two years of the current five-year budget.

After addressing annual maintenance and repair costs, any remaining funds at individual schools is insufficient to cover the cost of full network replacements. A full network replacement strategy is essential to meet ongoing needs and to reduce expensive and extensive repairs once equipment reaches end-of-life. The actual cost of LAUSD school network replacement is on average five to six times greater than the current \$150 per student budget allocation. Factors attributing to higher costs are associated with strict building codes, prevailing wage laws, radio frequency standards, and the cost of living in the Los Angeles area. A District-wide allocation, whereby funding allocation is not restricted to a specific schools, would help address this challenge. Under this alternate funding strategy, LAUSD would file for basic maintenance support for all schools and use any remaining Category 2 funding for network upgrades at highest need schools based on established life-cycle criteria.

LAUSD appreciates the opportunity to submit our response to comments regarding Category 2 budgets and looks forward to further participation and discussion with the Commission.

Respectfully Submitted,

James Alther, Senior IT Director

Los Angeles Unified School District